



# Recovery Nutrition:

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(notes from her PowerPoint presentation, for the WSC Recovery workshop, 2007)

One of the most important elements of good sports nutrition

Consider recovery from training and competition.

\$\$ spent on massage creams, ice baths, tight clothes (skins) could a banana be just as good??

## Three ‘R’s’ of Recovery

- **Rehydrate**
- **Refuel**
- **Repair**

### Rehydrate:

A 2% dehydration can decrease performance notably

Decreased urine output, strong thirst indicates 3-4% dehydration

% body weight lost can estimate % dehydration. Aim to replace 150% of deficit. ie ↓ 1kg, drink 1.5 litres over next 2-3 hours



### Can You Drink too much?

Yes – possible to reach hyponatremia (low blood sodium) from over consumption of fluid

-dangerous condition with symptoms similar to dehydration

-middle aged females participating in sub-maximal endurance events most at risk

### Are sports drinks for everyone?

NO – sports drinks are not beneficial for all athletes. May contribute to excess calories, dental decay or

replace a nutrient dense protein containing snack

However, they are useful to:

-encourage fluid consumption

-provide optimal electrolytes

-provide carbohydrate as well as fluid



## **The perfect celebratory drink?**

### **Alcohol:**

- May inhibit optimal glycogen recovery
- May worsen extent soft tissue injury
- Most significant consequences are indirect; athletes forget appropriate nutrition practices and eat hot chips as recovery meal or participate in dangerous activities.

### **Refuel:**

- Takes 20-24hours for complete glycogen resynthesis
- Many athletes have <12hours between sessions so promoting rapid refuelling is critical
  - low glycogen levels will decrease time to fatigue, ie “hit the wall” earlier.

### **When should you eat? I don't feel like eating post workout.**

Total carbohydrate requirements over the day are most important. This amount is specific to the individual.

- If <8 hours between events important to refuel within 30 minutes try liquid carbohydrate sources.
- Need ~1gCHO/kg/hour until normal meal patterns resume

### **Recovery on an energy budget**

When athletes are decreasing bodyweight ie pre-season this should not occur at the detriment of recovery or quality of training, resistance to infection will likely decrease and fatigue will increase

- Recovery snack must be *part of* total energy budget not *in addition to*.
- \*Meal timing is important to achieve this

### **Energy restriction**

Negative energy balance is the only physiological way to decrease weight

Athletes on an energy budget must be careful with food choice to ensure adequate protein and optimise carbohydrate intake.

- Food choices should be nutrient dense



### Recovery Foods – quiz

The following all provide ~50g carbohydrate

800ml Gatorade

1 banana + 200g tub low fat yoghurt

Sustagen tetra + small apple

1.5 slices pizza hut supreme pizza

2 x pale ale + large bucket hot chips

King size mars bar



### Which would be filling?

#### Which provides nutrients also?

800ml Gatorade **200Cal 0g Fat**

1 banana + 200g tub low fat yoghurt **230Cal 2g Fat**

Sustagen tetra + small apple **300Cal 4g Fat**

King size mars bar **370Cal 14g Fat**

1.5 slices pizza hut supreme pizza **545Cal 25g Fat**

2 x pale ale + large bucket hot chips **680Cal 32g Fat**



### Repair/regenerate

Lollies are not ideal recovery foods

The recovery snack should contain protein to help stimulate repair of muscle damage

### Does more protein=bigger muscles?

No – hard training with adequate protein *and carbohydrate* will help achieve muscular gains

Positive energy balance required to ‘bulk up’

Protein is important before and after weight training. Think “pre-recovery”

### Bulking up

10-20g high quality protein + 1gCHO/kgBW ideal pre weights workout

Include carbohydrate in recovery snack post weights or even during long weights session eg gatorade.

Many athletes trying to bulk up eat plenty of protein but inadequate carbohydrate.

### Some recovery ideas...

300ml **low fat milkshake**

1 ½ cups cereal flakes with LF milk

2 crumpets/english muffins with low fat cheese slices

1 ham or tuna sandwich + 1x fruit

220g baked beans + toast

200g low fat yoghurt with 1 cup fruit salad

Many commercial bars and drinks can be useful as they are portable and easy.



### For more information

For specific and individual sports nutrition advice, Tanya can be contacted through the Wakefield Sports Clinic on 8232 5833, or visit [www.wakefieldsports.com.au](http://www.wakefieldsports.com.au) for more on our Education Sessions.